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Project portfolio management in turbulent times

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Key findings:

- The firms studied have either introduced project portfolio management (PPM), or changed their approach to it, in order to address the difficult economic conditions.
- PPM must be supported by strong governance processes, rigorous business cases and close monitoring of project progress and outcomes.
- The main rationale for PPM was found to be to ensure resources are focussed on the right projects i.e. those that are aligned with business strategy.
- The study identifies six practices that contribute to PPM: strategic alignment of projects; visibility of projects; allocating scarce resources; prioritisation and categorisation of projects; balancing risk across projects and de-escalation of projects.
- The firms studied reported PPM has improved investment decision making and project delivery and hence has helped them respond to the current turbulent times.

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Introduction

When economic conditions become more challenging, organisations often have fewer resources to deploy on new business or change projects and programmes, reducing the number of such initiatives they can undertake. However, at such times, the projects and programmes they do invest in are often more critical, since they may be essential to deliver efficiency savings, sustain revenue or improve aspects of performance on which the survival of the organisation can depend. The current turbulent economic conditions appear to have caused increasing adoption of project portfolio management (PPM) by organisations. PPM can be defined as: managing a diverse range of projects and programmes to achieve the maximum organisational value within resource and funding constraints, where 'value' does not imply only financial value but also includes delivering a range of benefits which are relevant to the organisation's chosen strategy.

The study

We set out to explore the use of PPM by organisations during the current turbulent economic conditions. We wished to explore what activities and practices were involved in their approach to PPM and how these practices were influenced by the current economic conditions. We also explored the benefits they were deriving from their use of PPM. Where possible we sought to identify general lessons and effective practice from these real-world case studies and these are provided at the end of this summary.

We carried out five case studies of different organisations, of different sizes in a range of business sectors: news and media, professional services, insurance, pharmaceuticals and IT services. Interviews were carried out with a number of senior managers and professionals in each organisation. The project portfolios included only IT projects in the news and media and pharmaceutical companies and all types of projects in the other three organisations. However, given many projects within organisations include a significant degree of IT, these latter broadly based portfolios also include IT investments. (More detail about the case studies and how the research was undertaken is provided in the appendix.)

Findings

Increased adoption of PPM

All the firms had either introduced PPM or changed their approach to PPM in the last two years. They emphasised that the uncertain market conditions had resulted in severe resource constraints and restructuring in their organisations and that PPM had been adopted or had gained greater emphasis as a result of these constrained conditions.

Governance of projects and PPM

In all cases decisions on approval of major new projects and prioritisation of projects was undertaken by a governance group involving executive management. For example, the news and media firm had an IT investment board and the insurance company had a Corporate Programme Steering Group (CPSG). In both cases these boards met once a month to monitor project progress, approve new projects and, importantly, review the overall performance of the portfolio. This was similar in the other three firms, but the boards met quarterly. All the boards were supported by project or programme offices that collected and analysed the information on project status and updated the overall portfolio. At the same time as introducing or changing their approach to PPM, most of the case study firms had introduced new investment governance structures and changed project assessment and appraisal processes and stressed these were important contributors to effective implementation and operation of PPM.

The practices of PPM in turbulent times

The following sections discuss the six practices that the case study firms undertake as part of their PPM activities. Examples of how these practices are being operationalised in the current turbulent market conditions are also discussed.

1. Strategic alignment of projects

All five case study organisations stated that the ability to identify the 'right' projects was a key part of PPM. This concept of 'right' comprised a blend of being consistent with and contributing to the strategic objectives of the organisation and being feasible to deliver successfully. None of the organisations stated that they were doing PPM simply to identify projects with the greatest financial value or return.

Three of the case study firms, namely the news and media, professional services and pharmaceutical firms, confirmed that this need to identify and pursue the 'right projects' had arisen from the tougher economic and trading conditions that characterised the time of the study. This was described:

'The amount of money available for projects is significantly less than it used to be here. I've been with (unnamed company) for coming up to six years and from an IT background and it felt as if every single idea got authorised and now it's much more selective, partly as a result of money constraints but it's much more effective as a result. We are doing the important stuff.'
PPM support manager, professional services firm

In the professional services and IT services firms, there was a belief that the organisational strategy was driving the identification and selection of projects:

'We have a very clear strategy in place that is revised annually. We are therefore starting from a clear position and when projects are put forward they have arisen from an understanding of our strategy.'
Director of operations and finance, professional services firm

However, in the other three firms, the news and media, insurance, and pharmaceutical firms, it was recognised that projects were justified by relating them back to the strategy, rather than them being driven by the strategy. Firms that were aligning projects back to their strategy realised this had limitations but viewed it as a developmental step towards being able to use the organisation's strategy to identify and drive projects:

'We have had a rough concept of what the strategy is and a sense that the projects are going to help us on the journey. But I think that is changing and we're now trying to be much more focused. If there's really a common strategy of growth, then which two or three projects are going to make the biggest difference - the ones we should put our money into? I think those kind of decisions are not being taken yet but I think we're trying to build and get to that point.'
Head of corporate program office, insurance firm

Most of the firms observed that the process of achieving strategic alignment had implications for the timing and duration of projects. For example, the professional services firm, which did use their strategy to identify and drive projects, had a very strong annual strategy and budget setting process. This resulted in new projects being identified each year but also that the majority of projects lasted less than a year, typically six to nine months. Whilst this meant the portfolio could be 're-balanced' as business priorities evolved, it did preclude the organisation from being able to undertake more significant, longer-term projects and change programmes.

In contrast, the insurance, IT services and pharmaceutical firms developed longer-term strategies, typically five years. Whilst projects and programmes could be aligned to these strategies, it made it difficult for them to identify the shorter-term priorities which they believed to be most important to the organisation in the current environment.

Whilst the organisations all expressed a wish to be able to use strategic objectives to identify projects, there was a recognition that it was still appropriate to include some 'bottom up' projects; that is beneficial projects that are identified within functional areas of the business emerge from operational performance issues or in response to competitors' actions.

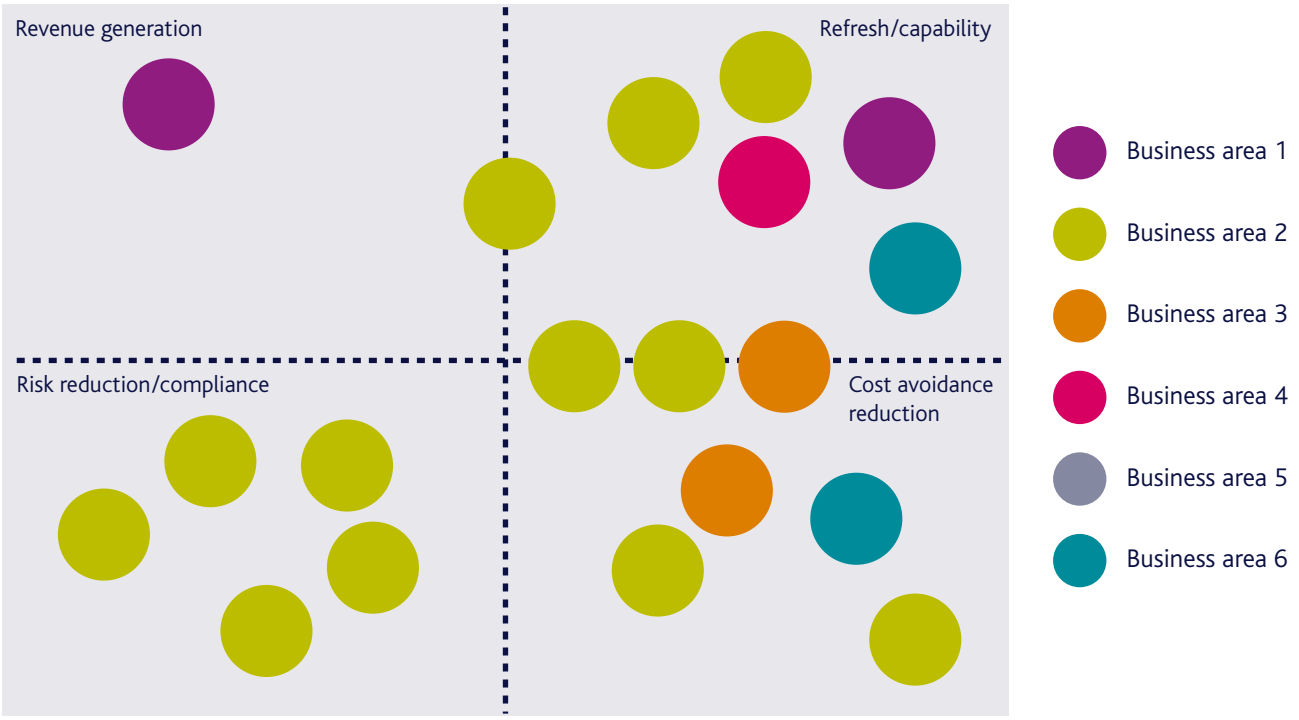
2. Visibility of projects

One PPM issue which all the organisations continue to find challenging is, once projects have been approved, which should be included in the portfolio. If too many projects are included, then the portfolio tends to become too large to manage since it may contain many small projects. However, if only a proportion of approved projects are included in the portfolio, then the organisation does not have a full view of the project activity ongoing across the organisation.

Most of the organisations included approved projects based on the estimated cost of the project. As would be expected the figure was higher in the larger organisations, but each used a cost threshold to determine inclusion. For example, the pharmaceutical company has on average, 60-80 ongoing IT projects, but only 20-25 were included in the portfolio. These 20-25 projects included the larger projects and projects viewed as strategic because they were enablers of other major investments in the organisation.

The insurance firm in particular stated that an important rationale for adopting PPM was to achieve greater visibility of the project activity being undertaken across the organisation. Large projects that spanned multiple business areas were included in the PPM processes. However, there were still a large number of smaller projects being undertaken within business units, which were not included in the portfolio.

Figure 1: Example project portfolio



Whilst these projects often had funding from the business unit involved, and hence were legitimate or approved projects, the lack of inclusion in the portfolio meant that their impact on the limited resources of the organisation was not clear. As a result, the larger organisation-wide projects often faced problems and delays when they needed local support or resources, only to find that they were already committed to local or smaller projects.

On balance all the firms had accepted that, provided the portfolio included a high percentage (estimated to be at least 80%) of the total resources involved, it was preferable not to present the board with details of all the projects, but only those that involved significant investment or risk or were integral to achieving the organisation's strategy.

3. Allocating scarce resources

Whilst the strategic alignment of projects was identified as an important part of the rationale for PPM, all the organisations stressed that they were facing significant resource constraints. For example, in the case of the pharmaceutical firm, the IT function had faced a reduction in staff from 650 to 500 over the previous year and had had their capital budget reduced by 20%.

In response to the financial constraints, reorganisation at both the news and media and pharmaceutical firms had included centralising their IT functions. This centralisation, which reduced local business unit independence and investment autonomy, contributed to the adoption of and rationale for PPM in both of these firms. The first step had been to gain visibility of all the projects being undertaken by the combined function and then, based on current business priorities, to determine how the reduced resources should be reallocated across them.

The news and media, insurance, and pharmaceutical firms described having insufficient skilled and experienced people as their main constraint, rather than funding. Project managers, technical leads, business analysts and implementation support staff were in short supply and this had a significant effect on the sequence and timing of projects. Recognising these constraints, each of these three firms assessed both strategic alignment (investment desirability) and resource availability (capability to deliver) when approving and prioritising projects. For example, in the pharmaceutical firm projects would not be approved at the first project stage-gate unless a project manager and technical lead had been identified. In the news and media

firm multiple claims for the same resources were resolved at the investment board meetings. In the professional services firm projects were approved but then scheduled by the programme office, based on resource availability.

4. Prioritisation and categorisation of projects

In addition to strategic alignment and resource constraints, the news and media, professional service, pharmaceutical and IT services organisations included other factors in their approval and prioritisation of investments. For example, the news and media firm considered return on investment (ROI) and compliance with regulatory requirements in their approval of projects to be included in the portfolio. They recognised however that their identification of expected financial benefits was weak and hence the ROI forecasts were treated with caution.

The news and media, professional services and pharmaceutical firms described how projects that were required for regulatory compliance or maintaining the infrastructure of the organisation were considered first and tended to always be approved as 'must do' investments.

Three of the organisations studied used a matrix to aid with project prioritisation. For example, in the case of the news and media firm, in addition to considering alignment with strategy and resource constraints, projects were also classified into four categories shown in figure 1. Classification of projects into these different categories allowed their investment board to consider whether it had an appropriate spread of projects across the portfolio, or if there were categories that were under or over represented and whether projects from all areas of the business were being supported.

Only the professional services and IT services firms attempted to compare the relative importance of current or 'active' projects with planned or potential projects when considering the future implications of committing resources based on the short-term priorities. In the IT services firm priority setting also considered how financial savings would be released from the earlier projects to enable later projects to be funded.

5. Balancing risk across projects

All of the case study firms also undertook risk analysis and management at the level of the individual projects in the portfolio. However, the IT services and pharmaceutical firms were the only organisations studied that actively balanced risk across their entire portfolios as well as trying to reduce the risk of individual projects. The IT services firm recognised that by adopting a portfolio approach they could afford to combine higher risk projects with lower risk projects:

'Some people say that you have to do fewer things better. I don't agree. I think what you have to do is manage your portfolio properly and have enough things going well that they outbalance the things going badly. An entire portfolio cannot be green all the time. You have got to have some slows, some fasts, some greens and some reds and you have got to have some balance.'
Chief executive UK, IT services

By including potential future projects in the portfolio the pharmaceutical company was able to compare the potential value to be delivered by projects not yet underway with those already in execution, to identify if resource allocation decisions would cause potentially more valuable projects to be postponed.

'We're looking at our critical resources, such as business analysts, to be sure we can take on everything that's likely to come through – have we the capacity or can we switch on those taps to meet what the customer groups are planning and requesting or are some resources so stretched already that milestones will be missed?'
Portfolio manager, R&D IT operations, pharmaceutical firm

The other three firms provided some examples of seeking to balance risk across the portfolio, however, this was not systematic as in the IT services and pharmaceutical firms. For example, the news and media company described how another major media company had just announced its intention to charge for online news, something the case study firm had not previously considered. They therefore intended to use their portfolio to consider how they were addressing strategic and external risks. In particular, they sought to identify which projects could be considered innovative and hence would help them to remain competitive in their changing marketplace. They identified that they had what they judged to be insufficient innovative projects and hence sought to address this.

In contrast, rather than address strategic or external risks, the insurance firm used their portfolio to address the operational risks inherent in undertaking multiple projects. As mentioned above, the insurance firm had used their portfolio to either delay or postpone certain projects to reduce change overload for the staff involved.

6. De-escalation of projects

All five case study firms also provided examples of having stopped or reconfigured approved or 'in flight' projects due to PMM. The IT services and pharmaceutical firms both now undertook what they termed 'project health-checks' during the implementation phase of all major projects.

These involved revisiting the investment justification and ensuring that the project still addressed the current strategic objectives and would deliver sufficient benefits, that is, it was still the 'right' project. Such ongoing monitoring is particularly important in allowing more rapid adaptation of strategy and projects to meet the turbulent and changing times the organisations are facing and especially for these two organisations, which tend to have longer duration, high cost projects. Both organisations had stopped in-flight projects as a result of these health-checks, something they said they did not do previously.

Benefits of PPM

Even though none of the five case study firms collected explicit data on the effectiveness of their PPM approach, all of them believed that the introduction the new or revised PPM approach had improved their decision-making with respect to which projects they should pursue, which should be postponed or not supported. In particular, they all believed that their portfolio approach had allowed them to ensure that resources were not wasted on projects that were not aligned to the strategic objectives of the organisation or were unlikely to succeed.

A number of the firms also reported that they believed that PPM had improved the quality of the business cases that were submitted for approval, partly due to introducing new business case formats as part of the changed governance processes, but also because of the increased scrutiny discouraging poor cases being presented.

They also reported that postponing or stopping projects that were judged less attractive had led to the projects that were undertaken tending to run more smoothly, with less crises and delays due to clashes with other projects and disputes over access to limited resources. This was described by one interviewee:

'I think individual projects are now delivered successfully pretty much on time and to budget. So, at that level and at the resource management level, things are a lot better managed as a result. And I think they're integrated into the business quicker as well. People are able to use these new bits of capability quicker.'
Programme and project support manager, professional services firm

The firms, in particular the pharmaceutical firm, reported that use of PPM had improved the quality of the discussion and decision making of the senior managers that were responsible for the approval and prioritisation of projects. They described how the presentation of consistent high-level information about the projects in the portfolio and a common understanding across the senior managers of what PPM involved in their organisation enabled the discussion and decisions to remain focussed on high level issues such as ensuring strategic alignment and the allocation of scarce resources. This was in contrast to meetings in the past where the same managers had become involved in discussing the detail of individual projects, often at great length.

Role of accountants

Interestingly, in none of the firms did management accountants have a role in assessing the results of project investments or in measuring the value derived from PPM. The accounting role was largely restricted to verifying project costs in business cases, assessing the financial risk of projects and ensuring financial compliance plus reviewing the budgetary implications of the overall investment portfolio. In two of the organisations, accounting involvement in project benefit analysis and review was just beginning, but in general the management accounting role in PPM was restricted to cost estimation and reporting actual costs and variances. At a higher level, chief finance officers (or the equivalent) were members of the governance group and in three cases chaired it.

Summary

This research has identified the following six practices that comprise PPM for the organisations studied and provided examples of how these practices were being operationalised in the current turbulent market conditions:

1. Strategic alignment of projects
2. Visibility of projects
3. Allocating scarce resources
4. Prioritisation and categorisation of projects
5. Balancing risk across projects
6. De-escalation of projects

Whilst firms do not need to undertake all of the six practices, greater benefits appear to arise from undertaking the majority of the practices, and in an explicit, coordinated and systematic way. This differentiates PPM from the approach of most investment appraisal boards that undertake some of these practices, usually without the same degree of explicitness and systematic coordination involved in PPM.

All of the organisations reported that PPM needs to be

supported by rigorously applied governance mechanisms and investment appraisal and review processes. These processes in turn rely on robust and consistent project management methods across the organisation and up-to-date and accurate reporting of project progress and performance.

Lessons for managers

Across the five case studies a number of themes stood out, which offer practical guidance for managers implementing or improving their organisations' approach to PPM:

- Those interviewed believed that PPM was an effective means of managing projects in turbulent market conditions. They believe that it had improved their decision-making with respect to which projects they should pursue and which should be postponed or not supported. The also believed that their portfolio approach had allowed them to ensure that resources were not wasted on projects that were not aligned to the strategic objectives of the organisation or were unlikely to succeed. That is PPM helped them to do the 'right projects'.
- Most organisations would prefer to use their organisational strategy to identify the projects needed to deliver that strategy. However this requires a level of clarity and understanding of the strategy that does not always exist, so a first step is to evaluate proposed projects in terms of their contribution to stated business objectives.
- It is important that the portfolio includes the majority of project activity across the organisation. However there is trade off between the number of projects included in the portfolio and the effectiveness of the governance processes.
- All agreed that the main resource constraint in the current conditions is skilled resources, rather than funding. Whilst strategic alignment is given as the main criteria for project approval, final approval or project commencement is currently reliant on resource availability. This is a new challenge for some of the organisations interviewed.
- A balanced portfolio should include a range of reward/risk combinations and successful PPM will include re-appraisal of this balance as both the projects and business conditions evolve. Risk should be considered across projects within the portfolio, as well as within individual projects, and should cover strategic, external and operational risks.
- Stopping projects that are no longer sufficiently beneficial is a key aspect of successful PPM. Interim reviews and project health-checks are an effective means of addressing project escalation.
- Although most organisations would ideally want to use multiple criteria to assess and prioritise projects, in difficult times, it is likely that the two criteria of strategic alignment and resource constraints will be the dominant.
- PPM needs to be supported by rigorously applied governance mechanisms and investment appraisal and review processes. Regular and frequent review of the project portfolio as a pattern of investments to deliver the business strategy is essential and relies on up-to-date and accurate reporting of project performance.

Appendix: about the research

A multiple case study approach was adopted in order to explore different settings and uses of PPM (Yin, 2003). In order to provide some generalisation, firms of different sizes were drawn from a number of industry sectors, as shown in Table A. All case studies were undertaken over the period October 2009 – March 2010. All of the organisations had their headquarters in the UK, but all had offices and operations in multiple countries around the world.

As shown in table A, three of the five case study organisations included all types of major organisational investments in their project portfolios, including IT investments, whilst the focus of the study in the other two organisations was their IT portfolios, since they did not operate PPM for their other types of projects. In all cases IT investments included new or replacement infrastructure and business applications.

Interviews were guided by a semi-structured interview schedule. Interviewees were asked to describe:

- Why they had adopted or developed their approach to PPM?
- What practices or activities were involved in their approach to PPM?
- How those practices had been affected by the current market conditions?
- What benefits they believed they had derived from PPM?

Interviews were carried out with senior managers and professionals in each case study organisation. Each had different roles related to the adoption and use of PPM within their organisation and hence were knowledgeable about the subject of interest and also could offer different perspectives. The interviews were recorded and fully transcribed. The transcripts from each interview were aggregated into case study summaries in order to gain a complete picture of the adoption and use of PPM in each organisation, including the influence of its organisational context. Other sources of data such as internal documents (governance board portfolio reports and presentations, business cases, implementation

progress reports etc) were also collected and used to inform the case study summaries (Denzin and Lincoln, 1998). The case study summaries were sent to the organisations to confirm their accuracy and in order to address any bias in interpreting the data and hence increase the internal validity of the study.

In addition to producing case study summaries, which provide an overall picture of PPM use in the organisations (Miles and Huberman, 1994), detailed analysis of the underlying transcript data was also undertaken. Data coding was undertaken using tabular layouts in a word processing package. Firstly the evidence gathered within each case study was analysed according to the topics listed in the four bullet points above. Rather than using an *a priori* approach to coding, an open coding approach was adopted (Strauss and Corbin, 1990). That is, for each topic, a label (code) for the data was generated based on the content of the data fragment. Codes that were similar were then linked (Dey, 1993), first within cases, and then across cases, in order to generate both a set of practices and data on how those practices have been affected by the current market conditions. A label was then given to each of the practices, as shown by the number section in the main summary. Coding was undertaken by one of the researchers and then independently assessed by the other two researchers involved in the study. Where discrepancies in coding occurred, these could be resolved by referring to the fuller case study.

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Table A: Case study firms and interviewees

Case	Industry	Number of employees	Adoption of PPM	Projects included in PPM	Number of interviewees	Interviewee roles
1	News and media	6,000	2009 – following centralisation of IT units	IT	7	CIO, head of change management, PMO manager, finance manager, business relationship and programme managers (3)
2	Professional services	300	2008 – after formation of a central programme management office	All	6	Executive director operations and finance, head of programme management, strategic planning manager, financial controller, programme and project managers (2)
3	Insurance	700	2008 – developed from IT project portfolio	IT and large non-IT	4	Head of corporate programme office, corporate strategy analyst, PMO manager, senior project manager
4	Pharmaceuticals (R&D IT portfolio)	110,000	2008 – following centralisation of IT units	IT	7	PMO manager, IT portfolio manager, IT finance manager, business project manager, business analyst, IT project and programme managers (2)
5	IT services	40,000	2008	All	6	CFO,CEO UK, sales director, strategy director Netherlands, integration and change programme director, managing consulant
Total					30	

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